



<p>1.0 Degree Title Specify the two degrees for concurrent degree programs</p> <div style="border: 1px solid black; padding: 2px; margin-bottom: 5px;">BSc</div> <p>1.1 Major (Legacy= Subject) (30-char. max.)</p> <div style="border: 1px solid black; height: 20px; margin-bottom: 5px;"></div> <p>1.2 Concentration (Legacy = Concentration/Option) If applicable (30 char. max.)</p> <div style="border: 1px solid black; height: 20px; margin-bottom: 5px;"></div> <p>1.3 Minor (with Concentration, if applicable) (30 char. max.)</p> <div style="border: 1px solid black; height: 20px; margin-bottom: 5px;"></div> <p>1.4 Category</p> <table style="width: 100%; border: none;"> <tr> <td style="width: 50%; vertical-align: top; padding: 2px;"><input type="checkbox"/> Faculty Program (FP)</td> <td style="width: 50%; vertical-align: top; padding: 2px;"><input type="checkbox"/> Honours (HON)</td> </tr> <tr> <td style="vertical-align: top; padding: 2px;"><input type="checkbox"/> Major</td> <td style="vertical-align: top; padding: 2px;"><input type="checkbox"/> Joint Honours Component (HC)</td> </tr> <tr> <td style="vertical-align: top; padding: 2px;"><input checked="" type="checkbox"/> Joint Major</td> <td style="vertical-align: top; padding: 2px;"><input type="checkbox"/> Internship/Co-op</td> </tr> <tr> <td style="vertical-align: top; padding: 2px;"><input type="checkbox"/> Major Concentration (CON)</td> <td style="vertical-align: top; padding: 2px;"><input type="checkbox"/> Thesis (T)</td> </tr> <tr> <td style="vertical-align: top; padding: 2px;"><input type="checkbox"/> Minor</td> <td style="vertical-align: top; padding: 2px;"><input type="checkbox"/> Non-Thesis (N)</td> </tr> <tr> <td style="vertical-align: top; padding: 2px;"><input type="checkbox"/> Minor Concentration (CON)</td> <td style="vertical-align: top; padding: 2px;"><input type="checkbox"/> Other</td> </tr> </table> <p style="text-align: center; margin-left: 150px;">Please specify</p> <div style="border: 1px solid black; width: 150px; margin-left: 150px; height: 20px; margin-bottom: 5px;"></div> <p>1.5 Complete Program Title</p> <div style="border: 1px solid black; padding: 2px; margin-bottom: 5px;">Joint Major in Atmospheric Science and Physics</div>	<input type="checkbox"/> Faculty Program (FP)	<input type="checkbox"/> Honours (HON)	<input type="checkbox"/> Major	<input type="checkbox"/> Joint Honours Component (HC)	<input checked="" type="checkbox"/> Joint Major	<input type="checkbox"/> Internship/Co-op	<input type="checkbox"/> Major Concentration (CON)	<input type="checkbox"/> Thesis (T)	<input type="checkbox"/> Minor	<input type="checkbox"/> Non-Thesis (N)	<input type="checkbox"/> Minor Concentration (CON)	<input type="checkbox"/> Other	<p>2.0 Administering Faculty/Unit</p> <div style="border: 1px solid black; padding: 2px; margin-bottom: 5px;">Science/Department of Atmospheric And Oceanic Sciences</div> <p>Offering Faculty/Department</p> <div style="border: 1px solid black; padding: 2px; margin-bottom: 5px;">Science – Atmospheric And Oceanic Sciences & Physics</div> <p>3.0 Effective Term of revision or retirement Please give reasons in 5.0 “Rationale” in the case of retirement (Ex. Sept. 2004 = 200409) <input type="checkbox"/> Retirement</p> <p>Term: <div style="border: 1px solid black; padding: 2px; display: inline-block; margin-left: 20px;">201109</div></p> <p>4.0 Existing Credit Weight Proposed Credit Weight</p> <table style="width: 100%; border: none;"> <tr> <td style="border: 1px solid black; padding: 2px; width: 50%; text-align: center;">67</td> <td style="border: 1px solid black; padding: 2px; width: 50%; text-align: center;">67</td> </tr> </table> <p>5.0 Rationale for revised program</p> <div style="border: 1px solid black; padding: 5px; margin-top: 5px;"> <p>We propose to add one course to the list of complementary Physics courses available to students in this program.</p> <p>The rationale is to allow increased breadth in the program, with the addition of an introductory fluid mechanics course, PHYS 432. Many atmospheric models are based on the physical properties of fluids which are introduced in PHYS 432.</p> <p>All prerequisites for the new complementary course, PHYS 432, are already required courses in the program.</p> <p>PHYS 432 is also a complementary course in the Honours Physics program, and in the Honours and Majors Atmospheric Science programs.</p> </div>	67	67
<input type="checkbox"/> Faculty Program (FP)	<input type="checkbox"/> Honours (HON)														
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<input type="checkbox"/> Minor Concentration (CON)	<input type="checkbox"/> Other														
67	67														

6.0 Revised Program Description (Maximum 150 words)

(No change from current description, which is given below for information):

This Major provides a solid basis for postgraduate study in meteorology, atmospheric physics, or related fields, as well as the necessary preparation for embarking on a professional career as a meteorologist directly after the B.Sc.

The program is jointly administered by the Department of Physics and the Department of Atmospheric and Oceanic Sciences. Students should consult undergraduate advisers in both departments.

7.0 List of existing program and proposed program

Existing program (list courses as follows: Subj Code/Crse Num, Title, Credit weight, under the headings of: Required Courses, Complementary Courses, Elective Courses)

Proposed program (list courses as follows: Subj Code/Crse Num, Title, Credit weight, under the headings of: Required Courses, Complementary Courses, Elective Courses)

Required Courses (64 credits)

ATOC 214 (3) Introduction: Physics of the Atmosphere
ATOC 215 (3) Oceans, Weather and Climate
ATOC 309 (3) Weather Radars and Satellites
ATOC 315 (3) Water in the Atmosphere
ATOC 412 (3) Atmospheric Dynamics
ATOC 540 (3) Synoptic Meteorology 1
ATOC 541 (3) Synoptic Meteorology 2
ATOC 546 (1) Current Weather Discussion

MATH 222 (3) Calculus 3
MATH 223 (3) Linear Algebra
MATH 314 (3) Advanced Calculus
MATH 315 (3) Ordinary Differential Equations

PHYS 230 (3) Dynamics of Simple Systems
PHYS 232 (3) Heat and Waves
PHYS 257 (3) Experimental Methods 1
PHYS 258 (3) Experimental Methods 2
PHYS 331 (3) Topics in Classical Mechanics
PHYS 333 (3) Thermal and Statistical Physics
PHYS 339 (3) Measurement Laboratory in General Physics
PHYS 340 (3) Majors Electricity and Magnetism
PHYS 342 (3) Majors Electromagnetic Waves
PHYS 446 (3) Majors Quantum Physics

Complementary Courses (3 credits)

PHYS 434 (3) Optics
or PHYS 439 (3) Majors Laboratory in Modern Physics

Required Courses (64 credits)

ATOC 214 (3) Introduction: Physics of the Atmosphere
ATOC 215 (3) Oceans, Weather and Climate
ATOC 309 (3) Weather Radars and Satellites
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PHYS 339 (3) Measurement Laboratory in General Physics
PHYS 340 (3) Majors Electricity and Magnetism
PHYS 342 (3) Majors Electromagnetic Waves
PHYS 446 (3) Majors Quantum Physics

Complementary Courses (3 credits)

PHYS 434 (3) Optics
or PHYS 439 (3) Majors Laboratory in Modern Physics
or **PHYS 432 (3) Physics of Fluids**

8.0 Consultation with
Related Units

Yes No

Financial Consult Yes No

Attach list of consultations

9. Approvals

Routing Sequence	Name	Signature	Date
Department	<input type="text"/>	<input type="text"/>	<input type="text"/>
Curric/Acad Committee	<input type="text"/>	<input type="text"/>	<input type="text"/>
Faculty 1	<input type="text"/>	<input type="text"/>	<input type="text"/>
Faculty 2	<input type="text"/>	<input type="text"/>	<input type="text"/>
Faculty 3	<input type="text"/>	<input type="text"/>	<input type="text"/>
SCTP	<input type="text"/>	<input type="text"/>	<input type="text"/>
GS	<input type="text"/>	<input type="text"/>	<input type="text"/>
APPC	<input type="text"/>	<input type="text"/>	<input type="text"/>
Senate	<input type="text"/>	<input type="text"/>	<input type="text"/>

Submitted by

Name
Phone
Email
Submission Date

To be completed by ARR:

CIP Code